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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/629,036	07/31/2000	Peter Tenereillo	CISCP661	4736

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EXAMINER	
BOUTAH, ALINA A	

ART UNIT	PAPER NUMBER
2143	

DATE MAILED: 12/02/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/629,036	TENEREILLO, PETER	
	Examiner	Art Unit	
	Alina N Boutah	2143	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *04 August 2004*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-4,6-9,16 and 18-23* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-4,6-9,16 and 18-23* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

Response to Amendment

This action is in response to Applicant's amendment filed August 4, 2004. Claims 1, 6, 7 and 16 have been amended. Claims 5, 10-15 and 17 have been cancelled. Claims 18-23 have been newly added. Claims 1-4, 6-9, 16 and 18-23 are pending in the present application.

Claim Rejections - 35 USC § 112

The following is a quotation of the first paragraph of 35 U.S.C. 112:

> The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

Claims 20-22 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the enablement requirement. The claim(s) contains subject matter, which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention.

Regarding claim 20, the specification fails to disclose "updating entries in said local director table at predefined intervals."

Regarding claim 21, the specification fails to disclose "wherein said predefined intervals correspond to a time period that a sticky connection is to last."

Regarding claim 22, the limitation "clearing all entries in said local director table for a specified natural class if a sticky connection is turned off for said specified natural class" is not disclosed anywhere in the specification.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claims 1-4, 6-9, 16 and 18-23 are rejected under 35 U.S.C. 103(a) as being unpatentable over USPN 6,445,704 issued to Howes et al. (hereinafter Howes) in view of USPN 6,754,706 issued to Swildens et al. (hereinafter Swildens).

(Amended) Regarding claim 1, Howes teaches a method for providing a persistent connection between a client and a real server, the method comprising:

receiving at a local director a request originating from a client for connection to a virtual server implemented on the local director, the local director in communication with two or more real servers (figure 1; col. 1, line 60 - col. 2, line 9);

identifying a natural class of an IP address of said first client (figure 1; col. 4, lines 47-65); and

forwarding to the selected real server transmissions originating from the client (abstract).

However, Howes fails to teach determining if the local director has received and sent out connection requests from said first client or any client having the same natural class as said first client by searching a table stored on the local director and identifying previous connections created between the local director and said two or more real servers; if the local director has received and sent out a connection request to one of said real servers from said first client or any

client having the same natural class as said first client, selecting the same real server for connection with said first client; and if the local director has not received and sent out a connection request to one of said real servers from said first client or any client having the same natural class as said first client, selecting one of said real servers based on load balancing.

Swilden teaches determining if a DNS server has received and sent out connection requests from said first client or any client having the same natural class as said first client by searching a table stored on the DNS server and identifying previous connections created between the local director and said two or more DNS servers (abstract; figures 1 and 2; col. 1, lines 55-67; col. 2, lines 39-65);

if the DNS server has received and sent out a connection request to one of said DNS servers from said first client or any client having the same natural class as said first client, selecting the same DNS server for connection with said first client (abstract; figures 1 and 2; col. 1, lines 55-67; col. 2, lines 39-65); and

if the DNS server has not received and sent out a connection request to one of said DNS servers from said first client or any client having the same natural class as said first client, selecting one of said DNS servers based on load balancing (abstract; figures 1 and 2; col. 1, lines 55-67; col. 2, lines 39-65).

At the time the invention was made, one of ordinary skill in the art would have been motivated to incorporate the teaching of Swilden into the teaching of Howes in order to ensure that persistence and latency tables are synchronized between the servers, therefore reducing network traffic (col. 2, lines 37-38 and 59-64).

Regarding claim 2, Howes teaches the method of claim 1 wherein selecting a real server comprises selecting the same real server for all clients having the same natural class subnet (col. 6, lines 9-11).

Regarding claim 3, Howes teaches the method of claim 1 wherein receiving a request comprises receiving a request from a firewall and wherein the IP address of the device is the IP address of the firewall (col. 1, line 60 – col. 2, line 3).

Regarding claim 4, Howes teaches the method of claim 1 wherein the request is an HTTP request (col. 4, lines 47-51).

Claim 6 is similar to claim 1 therefore is rejected under the same rationale.

Regarding claim 7, Howes teaches a computer program product wherein the computer readable medium is selected from a group consisting of CD-ROM, floppy disk, tape, flash memory, system memory, hard drive, and data signal embodied in a carrier wave (figure 10).

Regarding claim 8, Howes teaches the computer program product of claim 6 wherein the code that selects a real server comprises code that selects the same real server for all clients having the same natural class subnet (col. 6, lines 9-11).

Regarding claim 9, Howes teaches the computer program product of claim 6 wherein the code that receives a request comprises code that receives a request from a firewall and wherein the IP address of the device is the IP address of the firewall (col. 1, line 60 – col. 2, line 3).

(New) Regarding claim 18, Howes teaches the method of claim 1 further comprising updating said table each time a connection is made between the local director and said two or more real servers with a new natural class (col. 8, line 65 to col. 9, line 15).

(New) Regarding claim 19, Howes teaches the method of claim 1 wherein identifying a natural class comprises identifying a subnet mask and wherein the selection of the real server is based on the identified subnet mask (figure 1; col. 4, lines 47-65).

(New) Regarding claim 20, Howes teaches the method of claim 1 further comprising updating entries in said local director table at predefined intervals (col. 8, line 65 to col. 9, line 15; col. 8, lines 15-23).

(New) Regarding claim 21, Howes fails to explicitly teaches the method of claim 20 wherein said predefined intervals correspond to a time period that a sticky connection is to last. Swildens teaches a predefined interval corresponding to a time period that a sticky connection is to last (col. 7, lines 7-12). At the time the invention was made, one of ordinary skill in the art would have been motivated to incorporate the teaching of Swilden into the teaching of Howes in

order to ensure that persistence and latency tables are synchronized between the servers, therefore reducing network traffic (col. 2, lines 37-38 and 59-64).

(New) Regarding claim 22, Howes fail to teach the method of claim 1 further comprising clearing all entries in said local director table for a specified natural class if a sticky connection option is turned off for said specified natural class. Swildens teaches deleting entries in the DNS for a specified natural class (col. 7, lines 33-37). At the time the invention was made, one of ordinary skill in the art would have been motivated to incorporate the teaching of Swilden into the teaching of Howes in order to ensure that persistence and latency tables are synchronized between the servers, therefore reducing network traffic (col. 2, lines 37-38 and 59-64).

Claim 23 is similar to claim 1, therefore is rejected under the same rationale.

Regarding claim 16, Howes fails to teach the system of claim 23, wherein means for selecting a real server for connecting with the client comprises selecting the same real server for requests received from IP addresses having the same natural class subnet. Swildens teaches selecting the same DNS server for requests from IP addresses having the same natural class subnet (col. 7, lines 28-32). At the time the invention was made, one of ordinary skill in the art would have been motivated to incorporate the teaching of Swilden into the teaching of Howes in order to ensure that persistence and latency tables are synchronized between the servers, therefore reducing network traffic (col. 2, lines 37-38 and 59-64).

Response to Arguments

Applicant's arguments with respect to the rejection(s)of claim(s) 1-17 under 35 U.S.C. 102(e) have been fully considered and are persuasive. Therefore, the rejection has been withdrawn. However, upon further consideration, a new ground(s) of rejection is made in view of Howes in view of Swildens.

Conclusion

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Alina N Boutah whose telephone number is 571-272-3908. The examiner can normally be reached on Monday-Thursday (9:00 am - 7:00 pm).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David A Wiley can be reached on 571-272-3923. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

ANB

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PRIMARY EXAMINER